

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An image generation method for generating an image, the method comprising:

storing object data in an object data storage section;

disposing a plurality of objects in an object space, based on the object data stored in the object data storage section;

controlling a virtual camera;

generating an image viewed from the virtual camera in the object space while performing hidden surface removal processing;

disposing in the object space, a model object including a plurality of part objects each of which has a projection shape, a three-dimensional projecting portion and a display surface on which an image is drawn, the projecting portion extending at least in a direction perpendicular to the display surface, wherein a central part object included in the model object stands along a ~~Y-axis, the Y-axis being an axis along a vertical direction,~~ vertical central axis, and the rest of the part objects are positioned apart from a ~~central the central axis of the central part object; and~~ object, the central axis extending through a center of the central part object; and

rotating each of the part objects orbitally about the ~~Y-axis, central axis~~, with a processor, based on rotational information of the virtual camera so that the display surface of each of the part objects is directed toward the virtual camera when the virtual camera orbitally rotates about the ~~Y-axis-central axis~~ while being directed toward the central part object.

2. (Previously Presented) The image generation method as defined in claim 1, the method further comprising:

storing a Z texture in which an offset value of a Z-value is set on each texel in a texture storage section;

mapping the Z texture stored in the texture storage section on each of the objects; and

mapping on each of the part objects the Z texture for setting bump shapes on the display surface by pixel unit.

3. (Previously Presented) An image generation method for generating an image comprising:

storing object data in an object data storage section;

disposing a plurality of objects in an object space, based on the object data stored in the object data storage section;

generating the plurality of objects as three-dimensional objects including Z-texture values;

storing a Z texture in which an offset value of a Z-value is set on each texel in a texture storage section;

mapping the Z texture stored in the texture storage section on each of the objects;

controlling a virtual camera;

generating an image viewed from the virtual camera in the object space while performing hidden surface removal processing;

disposing a model object having a plurality of part objects in the object space, the part objects each having a display surface and being three-dimensional objects extending at least in a direction perpendicular to the display surface, wherein a central part object included in the model object stands along a Y-axis, the Y-axis being an axis along a vertical

direction, and the rest of the part objects are positioned apart from a central axis of the column-shaped part object;

rotating each of the part objects about the Y-axis, with a processor, based on rotational information of the virtual camera so that a display surface of each of the part objects on which an image is drawn is directed toward the virtual camera when the virtual camera rotates about the Y-axis while being directed toward the central part object; and

mapping on each of the part objects the Z texture for forming a virtual projection shape on the display surface of the part objects by pixel unit.

4-7. (Canceled)

8. (Original) The image generation method as defined in claim 1, wherein the part objects include a first part object and a second part object, the first and second part objects being adjacent each other,

the method further comprising:

disposing the first and second part objects so as to overlap each other in a view image viewed from the virtual camera or intersect each other even when the virtual camera rotates 360 degrees about a given coordinate axis.

9. (Previously Presented) The image generation method as defined in claim 3, wherein the part objects include a first part object and a second part object, the first and second part objects being adjacent each other,

the method further comprising:

disposing the first and second part objects so as to overlap each other in a view image viewed from the virtual camera or intersect each other even when the virtual camera rotates 360 degrees about a given coordinate axis.

10. (Currently Amended) At least one of an optical disc, magnetic optical disc, magnetic disc, hard disc, magnetic tape and memory embedded with a program for generating an image, the program causing a computer to implement processing of:

storing object data in an object data storage section;

disposing a plurality of objects in an object space, based on the object data stored in the object data storage section;

controlling a virtual camera;

generating an image viewed from the virtual camera in the object space while performing hidden surface removal processing;

disposing in the object space, a model object including a plurality of part objects each of which has a projection shape, a three-dimensional projecting portion and a display surface on which an image is drawn, the projecting portion extending at least in a direction perpendicular to the display surface, wherein a central part object included in the model object stands along a ~~Y-axis, the Y-axis being an axis along a vertical direction,~~ vertical central axis, and the rest of the part objects are positioned apart from ~~a central-the~~ central axis of the central part object, the central axis extending through a center of the central part object; and

rotating each of the part objects orbitally about the ~~Y-axis-central axis~~ based on rotational information of the virtual camera so that the display surface of each of the part objects is directed toward the virtual camera when the virtual camera orbitally rotates about the ~~Y-axis-central axis~~ while being directed toward the central part object.

11. (Previously Presented) The at least one of the optical disc, magnetic optical disc, magnetic disc, hard disc, magnetic tape and memory as defined in claim 10, the program causing a computer to implement processing of:

storing a Z texture in which an offset value of a Z-value is set on each texel in a texture storage section;

mapping the Z texture stored in the texture storage section on each of the objects; and

mapping on each of the part objects the Z texture for setting bump shapes on the display surface by pixel unit.

12. (Previously Presented) At least one of an optical disc, magnetic optical disc, magnetic disc, hard disc, magnetic tape and memory embedded with a program for generating an image, the program causing a computer to implement processing of:

storing object data in an object data storage section;

disposing a plurality of objects in an object space, based on the object data stored in the object data storage section;

generating the plurality of objects as three-dimensional objects including Z-texture values;

storing a Z texture in which an offset value of a Z-value is set on each texel in a texture storage section;

mapping the Z texture stored in the texture storage section on each of the objects;

controlling a virtual camera;

generating an image viewed from the virtual camera in the object space while performing hidden surface removal processing;

disposing a model object having a plurality of part objects in the object space, the part objects each having a display surface and being three-dimensional objects extending at least in a direction perpendicular to the display surface, wherein a central part object included in the model object stands along a Y-axis, the Y-axis being an axis along a vertical

direction, and the rest of the part objects are positioned apart from a central axis of the central part object;

rotating each of the part objects about the Y-axis based on rotational information of the virtual camera so that a display surface of each of the part objects on which an image is drawn is directed toward the virtual camera when the virtual camera rotates about the Y-axis while being directed toward the central part object; and

mapping on each of the part objects the Z texture for forming a virtual projection shape on the display surface of the part objects by pixel unit.

13-16. (Canceled)

17. (Previously Presented) The at least one of the optical disc, magnetic optical disc, magnetic disc, hard disc, magnetic tape and memory embedded with the program as defined in claim 10,

wherein the part objects include a first part object and a second part object, the first and second part objects being adjacent each other,

the program further causing a computer to implement processing of:

disposing the first and second part objects so as to overlap each other in a view image viewed from the virtual camera or intersect each other even when the virtual camera rotates 360 degrees about a given coordinate axis.

18. (Previously Presented) The at least one of the optical disc, magnetic optical disc, magnetic disc, hard disc, magnetic tape and memory embedded with the program as defined in claim 12,

wherein the part objects include a first part object and a second part object, the first and second part objects being adjacent each other,

the program further causing a computer to implement processing of:

disposing the first and second part objects so as to overlap each other in a view image viewed from the virtual camera or intersect each other even when the virtual camera rotates 360 degrees about a given coordinate axis.

19-20. (Canceled)

21. (Currently Amended) An image generation method for generating an image, the method comprising:

storing object data in an object data storage section;

disposing a plurality of objects in an object space, based on the object data stored in the object data storage section;

controlling a virtual camera;

generating an image viewed from the virtual camera in the object space while performing hidden surface removal processing;

disposing in the object space, a model object including a plurality of part objects each of which has a projection shape, a three-dimensional projecting portion and a display surface on which an image is drawn, the projecting portion extending at least in a direction perpendicular to the display surface, wherein a central part object included in the model object stands along a ~~Y-axis, the Y-axis being an axis along a vertical direction,~~ vertical central axis, and the rest of the part objects are positioned apart from a ~~central-the~~ central axis of the central part object, the central axis extending through a center of the central part object; and

rotating, with a processor, each of the part objects orbitally about an X-axis, which is ~~perpendicular to the Y-axis,~~ passes orthogonally through the central axis and extends in a direction orthogonal to a direction of sight line from the virtual camera, based on rotational information of the virtual camera so that the display surface of each of the part

objects is directed toward the virtual camera when the virtual camera orbitally rotates about the X-axis while being directed toward the ~~column-shaped~~ central part object.

22. (Previously Presented) An image generation method for generating an image comprising:

storing object data in an object data storage section;

disposing a plurality of objects in an object space, based on the object data stored in the object data storage section;

generating the plurality of objects as three-dimensional objects including Z-texture values;

storing a Z texture in which an offset value of a Z-value is set on each texel in a texture storage section;

mapping the Z texture stored in the texture storage section on each of the objects;

controlling a virtual camera;

generating an image viewed from the virtual camera in the object space while performing hidden surface removal processing;

disposing a model object having a plurality of part objects in the object space, the part objects each having a display surface and being three-dimensional objects extending at least in a direction perpendicular to the display surface, wherein a central part object included in the model object stands along a Y-axis, the Y-axis being an axis along a vertical direction, and the rest of the part objects are positioned apart from a central axis of the column-shaped part object;

rotating, with a processor, each of the part objects about an X-axis which is perpendicular to the Y-axis, based on rotational information of the virtual camera so that a display surface of each of the part objects on which an image is drawn is directed toward the

virtual camera when the virtual camera rotates about the X-axis, which is perpendicular to the Y-axis while being directed toward the central part object; and

mapping on each of the part objects the Z texture for forming a virtual projection shape on the display surface of the part objects by pixel unit.

23. (Currently Amended) At least one of an optical disc, magnetic optical disc, magnetic disc, hard disc, magnetic tape and memory embedded with a program for generating an image, the program causing a computer to implement processing of:

storing object data in an object data storage section;

disposing a plurality of objects in an object space, based on the object data stored in the object data storage section;

controlling a virtual camera;

generating an image viewed from the virtual camera in the object space while performing hidden surface removal processing;

disposing in the object space, a model object including a plurality of part objects each of which has a projection shape, a three-dimensional projecting portion and a display surface on which an image is drawn, the projecting portion extending at least in a direction perpendicular to the display surface, wherein a central part object included in the model object stands along a ~~Y-axis, the Y-axis being an axis along a vertical direction,~~ vertical central axis, and the rest of the part objects are positioned apart from a ~~central~~ the central axis of the central part object, the central axis extending through a center of the central part object; and

rotating each of the part objects orbitally about an X-axis, which is ~~perpendicular to the Y-axis, passes orthogonally through the central axis and extends in a~~ direction orthogonal to a direction of sight line from the virtual camera, based on rotational information of the virtual camera so that the display surface of each of the part objects is

directed toward the virtual camera when the virtual camera orbitally rotates about the X-axis while being directed toward the central part object.

24. (Previously Presented) At least one of an optical disc, magnetic optical disc, magnetic disc, hard disc, magnetic tape and memory embedded with a program for generating an image, the program causing a computer to implement processing of:

storing object data in an object data storage section;

disposing a plurality of objects in an object space, based on the object data stored in the object data storage section;

generating the plurality of objects as three-dimensional objects including Z-texture values;

storing a Z texture in which an offset value of a Z-value is set on each texel in a texture storage section;

mapping the Z texture stored in the texture storage section on each of the objects;

controlling a virtual camera;

generating an image viewed from the virtual camera in the object space while performing hidden surface removal processing;

disposing a model object having a plurality of part objects in the object space, the part objects each having a display surface and being three-dimensional objects extending at least in a direction perpendicular to the display surface, wherein a central part object included in the model object stands along a Y-axis, the Y-axis being an axis along a vertical direction, and the rest of the part objects are positioned apart from a central axis of the column-shaped part object;

rotating each of the part objects about an X-axis, which is perpendicular to the Y-axis, based on rotational information of the virtual camera so that a display surface of each

of the part objects on which an image is drawn is directed toward the virtual camera when the virtual camera rotates about the X-axis while being directed toward the central part object;
and

mapping on each of the part objects the Z texture for forming a virtual projection shape on the display surface of the part objects by pixel unit.

25. (Previously Presented) The image generation method as defined in claim 1, wherein the central part object is columnar shaped.